

## Appendix C

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*Canaan Valley Main Tract and Dolly Sods Wilderness Area*

## Wilderness Review

- Introduction
- Phase I – Wilderness Inventory
- Summary of Wilderness Inventory Findings

## Introduction

The purpose of a wilderness review is to identify and recommend to Congress lands and waters of the National Wildlife Refuge System (Refuge System) that merit inclusion in the National Wilderness Preservation System (NWPS). Wilderness reviews are required elements of comprehensive conservation plans, are conducted in accordance with the refuge planning process outlined in the Fish and Wildlife Service Manual (602 FW 1 and 3), and include compliance with the National Environmental Policy Act (NEPA) and public involvement.

The wilderness review process has three phases: inventory; study; and, recommendation. Lands and waters that meet the minimum criteria for wilderness are identified in the inventory phase. These areas are called wilderness study areas (WSAs). In the study phase, a range of management alternatives are evaluated to determine if a WSA is suitable for wilderness designation or management under an alternate set of goals and objectives that do not involve wilderness designation.

The recommendation phase consists of forwarding or reporting the suitable recommendations from the Director of the U.S. Fish and Wildlife Service (Service) through the Secretary of the Interior and the President to Congress in a wilderness study report. The wilderness study report is prepared after the record of decision for the final Comprehensive Conservation Plan (CCP) has been signed. Areas recommended for designation are managed to maintain wilderness character in accordance with management goals, objectives, and strategies outlined in the final CCP until Congress makes a decision or the CCP is amended to modify or remove the wilderness proposal.

Canaan Valley National Wildlife Refuge (refuge) personnel, listed at the end of this appendix, met in 2007 to gather information and conduct an inventory of the refuge's lands and waters. Wilderness inventory areas (WIA) are bounded by roads that are suitable for public travel. After dividing the refuge into suitable WIAs, the team used site knowledge, existing land status maps, photographs, available land use information and road inventory data to determine if each inventory area met the minimum criteria for wilderness. Aerial photographs were used to document the imprint of human work, road locations, and other surface disturbances.

## Phase I – Wilderness Inventory

### Introduction

The wilderness inventory is a broad look at each planning area to identify WSAs. A WSA is an area of undeveloped Federal land that retains its primeval character and influence, without permanent improvements or human habitation, and further, meets the minimum criteria for wilderness as identified in Section 2(c) of the Wilderness Act.

### Minimum Wilderness Criteria

A WSA is required to be a roadless area or an island of any size, meet the size criteria, appear natural, and provide for solitude or primitive recreation.

*Roadless* — Roadless refers to the absence of improved roads suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use. A route maintained solely by the passage of vehicles does not constitute a road. Only Federal lands are eligible to be considered for wilderness designation and inclusion within the NWPS.

The following factors were the primary considerations in evaluating the roadless criteria.

- A. The area does not contain improved roads suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use.
- B. The area is an island, or contains an island that does not have improved roads suitable and maintained for public travel by means of motorized vehicles primarily intended for highway use.
- C. The area is in Federal fee title ownership.

(1) *Size*— The size criteria can be satisfied if an area has at least 5,000 acres of contiguous roadless public land, or is sufficiently large that its preservation and use in an unimpaired condition is practicable.

The following factors were the primary considerations in evaluating the size criteria.

- A. An area of more than 5,000 contiguous acres. State and private lands are not included in making this acreage determination.
- B. A roadless island of any size. A roadless island is defined as an area surrounded by permanent waters or that is markedly distinguished from the surrounding lands by topographical or ecological features.
- C. An area of less than 5,000 contiguous Federal acres that is of sufficient size as to make practicable its preservation and use in an unimpaired condition, and of a size suitable for wilderness management.
- D. An area of less than 5,000 contiguous acres that is contiguous with a designated wilderness, recommended wilderness, or area under wilderness review by another Federal wilderness managing agency such as the U.S. Forest Service, National Park Service, or Bureau of Land Management.

(2) *Naturalness* — The Wilderness Act, Section 2(c), defines wilderness as an area that “generally appears to have been affected primarily by the forces of nature with the imprint of human work substantially unnoticeable.” The area must appear natural to the average visitor, rather than “pristine.” The presence of historic landscape conditions is not required.

An area may include some human impacts provided they are substantially unnoticeable in the unit as a whole. Significant hazards caused by humans, such as the presence of unexploded ordnance from military activity and the physical impacts of refuge management facilities and activities are also considered in evaluating the naturalness criteria.

An area may not be considered unnatural in appearance solely on the basis of the sights and sounds of human impacts and activities outside the boundary of the unit. The cumulative effects of these factors in conjunction with land base size, physiographic and vegetative characteristics were considered in the evaluation of naturalness.

The following factors were the primary considerations in evaluating naturalness.

- A. The area appears to have been affected primarily by the forces of nature with the imprint of human work substantially unnoticeable.
- B. The area may include some human impacts provided they are substantially unnoticeable in the unit as a whole.
- C. Does the area contain significant hazards caused by humans, such as the presence of unexploded ordnance from military activity?
- D. The presence of physical impacts of refuge management facilities and activities.

(3a and 3b) *Solitude or Primitive and Unconfined Recreation* —A WSA must provide outstanding opportunities for solitude or primitive and unconfined recreation. The area does not have to possess outstanding opportunities for both solitude and primitive and unconfined recreation, and does not need to have outstanding opportunities on every acre. Further, an area does not have to be open to public use and access to qualify under this criteria; Congress has designated a number of wilderness areas in the Refuge System that are closed to public access to protect resource values.

Opportunities for solitude refer to the ability of a visitor to be alone and secluded from other visitors in the area. Primitive and unconfined recreation means non-motorized, dispersed outdoor recreation activities that

are compatible and do not require developed facilities or mechanical transport. These primitive recreation activities may provide opportunities to experience challenge and risk, self reliance, and adventure. These two elements are not well defined by the Wilderness Act, but can be expected to occur together in most cases. However, an outstanding opportunity for solitude may be present in an area offering only limited primitive recreation potential. Conversely, an area may be so attractive for recreation use that experiencing solitude is not an option.

The following factors were the primary considerations in evaluating outstanding opportunities for solitude or primitive unconfined recreation.

- A. The area offers the opportunity to avoid the sights, sounds and evidence of other people. A visitor to the area should be able to feel alone or isolated.
- B. The area offers non-motorized, dispersed outdoor recreation activities that are compatible and do not require developed facilities or mechanical transport.

*(4) Supplemental Values*— The Wilderness Act states that an area of wilderness may contain ecological, geological, or other features of scientific, educational, scenic or historical value. Supplemental values of the area are optional, but the degree to which their presence enhances the area's suitability for wilderness designation should be considered. The evaluation should be based on an assessment of the estimated abundance or importance of each of the features.

## Summary of Wilderness Inventory Findings

The wilderness inventory team identified 14 WIAs within the approved acquisition boundary of the Canaan Valley refuge (map C-1). The inventory phase to evaluate tracts that would qualify as WSA's used the minimum criteria established to support wilderness. As such major factors that would reduce an area's suitability for wilderness consideration were used as dividing lines for WIA boundary delineation. The majority of these boundaries were drawn following public or refuge roads which are suitable or are currently used for public travel. Other divisions were formed by the presence of maintained gas pipeline right of ways, a major visible break in forest cover and are mowed to prevent woody encroachment. Roads and maintained gas pipelines were considered to break the criteria for naturalness (i.e. the works of humans being substantially unnoticeable to the average visitor). We determined that WIAs 7 and 10 meet the necessary criteria for a WSA. The other 12 WIAs in the Canaan Valley refuge either did not meet the size criteria or did not meet one of the other necessary criteria for designation as a WSA. Therefore, the suitability of the lands listed in Table C-1 (below) that did not meet the necessary criteria was not further analyzed for wilderness designation in the draft Comprehensive Plan/Environmental Assessment (draft CCP/EA).

## Wilderness Inventory Conclusion

In this final CCP, we have completed the inventory phase of the wilderness review process and have established two WSAs. While WIAs 7 and 10 qualify as WSAs, the planning team has decided that it needs more time to pursue the wilderness review process for these WIAs. Both these areas were purchased from the same owner and they have similar issues related to property encumbrances. In general, we have concerns about Service jurisdiction and management capability for these areas. More specifically, we need a better understanding of how the many reserved rights, rights-of-way, leases, and other agreements (up to 37 in and around WIA 7 alone) would affect wilderness designation. Based on informal guidance developed at the National Wildlife System Planning Chief's meeting in July 2007 in Arlington, Virginia, we will prepare an amendment to the CCP after we evaluate the suitability of these WSAs for wilderness designation. We will complete the wilderness review process within 3 years of approval of the final CCP. During that time, we will manage the WSAs to maintain their size, naturalness, and outstanding opportunities for solitude or primitive recreation to the extent that it will not prevent us from fulfilling and carrying out refuge establishing purposes and the Refuge System mission.

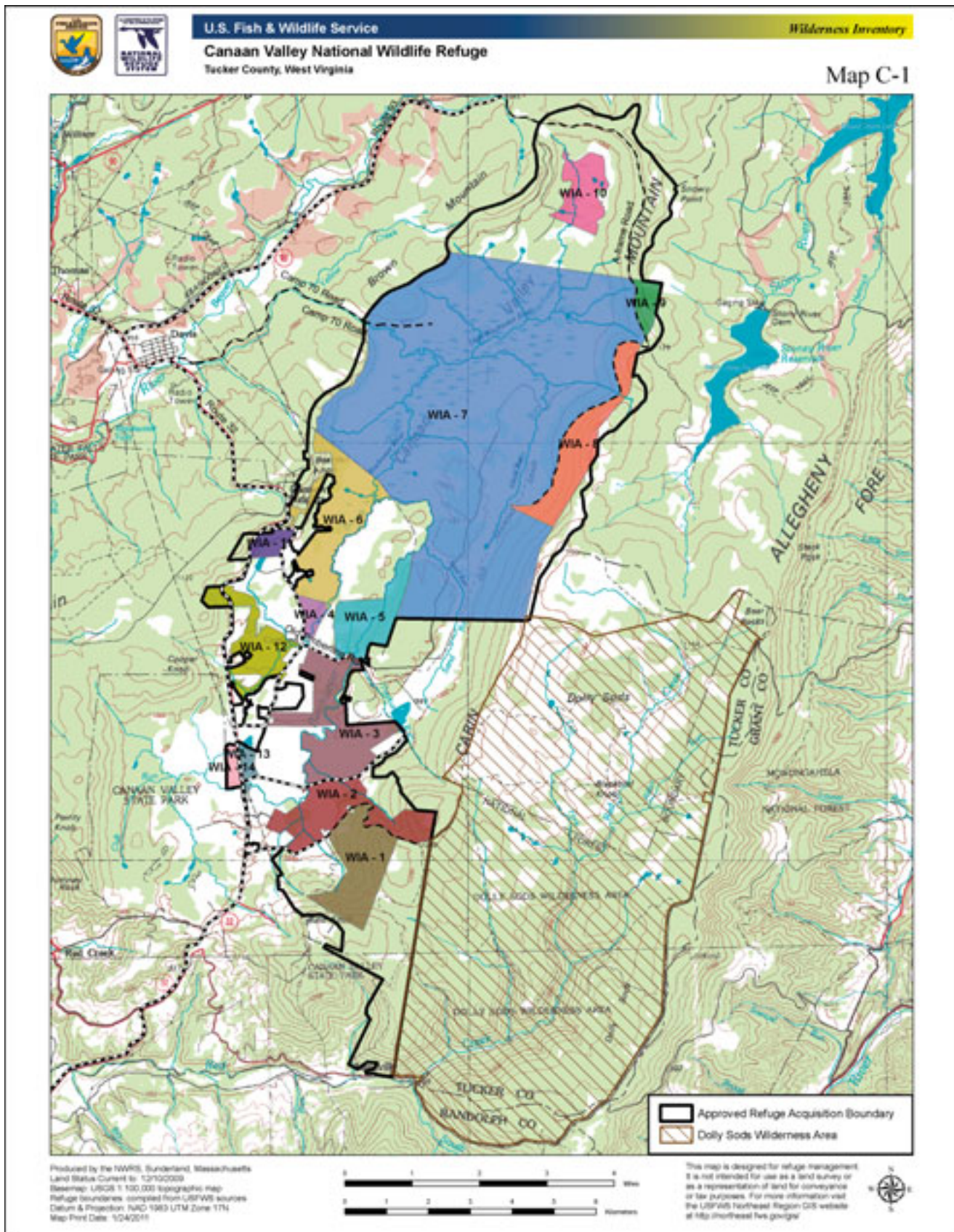


Table C.1. Wilderness Evaluation

Wilderness Inventory Area	(1) Size: at least 5,000 acres; or a roadless island; or is of sufficient size to make practicable its preservation and use in an unimpaired condition; or is contiguous with designated or recommended wilderness by another Federal agency.	(2) Naturalness: generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.	3(a) Solitude: has outstanding opportunities for solitude.	3(b) Primitive and Unconfined Recreation: has outstanding opportunities for primitive and unconfined-type of recreation.	(4) Supplemental Values: contains ecological, geological or other features of scientific, educational, scenic or historical value.	Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
<b>WIA 1</b> 746 acres	No. Less than 5,000 acres; not an island; not of sufficient size for preservation and use in an unimpaired condition; not adjacent to a Federal wilderness area.	No. Due to intense logging in the past and miles of logging roads, this area exhibits signs of major human impact and would require extensive restoration efforts to restore its naturalness. This area has not yet been restored, nor is it in the process of being restored.	No. Adjacent commercial cross-country skiing and snowshoeing operation attracts thousands of recreational users during the winter months.	No. The size of this tract and the fact that it is surrounded on all sides by either a road or private property make it difficult for recreational users to experience unconfined recreation.	Yes. Threatened and endangered species habitat	No
<b>WIA 2</b> 768 acres	Yes. Less than 5,000 acres; not an island; and not of sufficient size for preservation and use in an unimpaired condition. WIA 2 and Dolly Sods Wilderness Area meet where Forest Road 80 crosses over from refuge land to Forest Service land.	No. The property has an actively maintained gas pipeline right-of-way (ROW) and a high power transmission line. The ROW requires regular mowing, so both these features constitute major human impacts that significantly affect the property's naturalness.	No. Because this area is adjacent to Timberline Resort, which attracts thousands of skiers in the winter and hundreds of bicyclists in the summer, there are limited opportunities for solitude. Visual and auditory impacts of this resort include housing developments and roads.	No. Because of its small size and the surrounding developed areas (private property), there are limited opportunities for primitive and unconfined recreation.	Yes. Rare plant communities, scenic value, endangered species habitat	No

Wilderness Inventory Area	(1) Size: at least 5,000 acres; or a roadless island; or is of sufficient size to make practicable its preservation and use in an unimpaired condition; or is contiguous with designated or recommended wilderness by another Federal agency.	(2) Naturalness: generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.	3(a) Solitude: has outstanding opportunities for solitude.	3(b) Primitive and Unconfined Recreation: has outstanding opportunities for primitive and unconfined-type of recreation.	(4) Supplemental Values: contains ecological, geological or other features of scientific, educational, scenic or historical value.	Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
<b>WIA 3</b> 992 acres	No. Less than 5,000 acres, not an island and not adjacent to a Federal wilderness area. Not suitable for preservation and use in an unimpaired condition, and not suitable for wilderness management because of its shape and irregular boundary, and lack of a sufficient core area that leaves the whole area vulnerable to impairment from adjacent land uses.	No. The property has an actively maintained gas pipeline right-of-way and a high power transmission line. The ROW requires regular mowing, so both these features constitute major human impacts that significantly affect the property's naturalness.	No. The area's north and east side is adjacent to Timberline Resort. Visitors will see development from every perspective in this inventory area, thus limiting opportunities for solitude. Auditory impacts from resort residents and guests, and from surrounding roads, also limit opportunities for solitude.	No. The area's irregular boundary and lack of a large core do not lend itself to outstanding opportunities for primitive and unconfined recreation.	Yes. Rare plant communities, scenic value	No
<b>WIA 4</b> 107 acres	No. Less than 5,000 acres, not an island, not of sufficient size to make practicable its preservation and use in an unimpaired condition, and not suitable for wilderness management. Also, not adjacent to a Federal wilderness area.	No. Although physical and plant communities are natural, this area is bordered by a county road. Vehicle traffic on this road constitutes a major human impact and seriously affects the naturalness character.	No. Because of the visual and auditory impacts of the bordering county road, there is virtually no opportunity for solitude.	No. Because of the small size and the proximity of the county road, there are no outstanding opportunities for primitive or unconfined recreation.	Yes. Ecological values because of the wetland.	No

Wilderness Inventory Area	(1) Size: at least 5,000 acres; or a roadless island; or is of sufficient size to make practicable its preservation and use in an unimpaired condition; or is contiguous with designated or recommended wilderness by another Federal agency.	(2) Naturalness: generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.	3(a) Solitude: has outstanding opportunities for solitude.	3(b) Primitive and Unconfined Recreation: has outstanding opportunities for primitive and unconfined-type of recreation.	(4) Supplemental Values: contains ecological, geological or other features of scientific, educational, scenic or historical value.	Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
<b>WIA 5</b> 547 acres	No. Less than 5,000 acres; not an island; not of sufficient size to make practicable its preservation and use in an unimpaired condition, and not suitable for wilderness management. Also, not adjacent to a Federal wilderness area.	No. The property contains a private in-holding that has a power line and a maintained road that is suitable for public travel. These two features significantly impair the area's naturalness.	No. Opportunities for solitude are limited and not outstanding because of a road that runs through the property and because of the adjacent Timberline Resort, which has substantial development.	No. Because of the area's small size and the adjacent county road, there are no outstanding opportunities for primitive or unconfined recreation.	Yes. Ecological values	No
<b>WIA 6</b> 966 acres	No. Less than 5,000 acres and not an island. Not suitable for preservation and use in an unimpaired condition, and not suitable for wilderness management because of slivers of land on the area's west side that create an unmanageable boundary and leaves these areas vulnerable to impairment from adjacent land uses. Not adjacent to a Federal wilderness area.	Yes.	No. Although the northern portions of this area may provide some outstanding opportunities for solitude, this is only a small portion of the rest of the area and it is not representative of the whole area. Substantial visual and auditory impacts of surrounding developments and roads affect the wilderness character of the rest of the area.	No. Because of the area's small size and adjacent roads, there are no outstanding opportunities for primitive or unconfined recreation.	Yes. Rare plant communities, scenic values	No
<b>WIA 7</b> 9,969 acres	Yes. Greater than 5,000 acres and shares a boundary of a little under 400 feet with the Dolly Sods Wilderness Area	Yes. However, possible unexploded ordnance issues need to be explored	Yes	Yes	Yes. Rare plant communities, scenic values	Yes

Wilderness Inventory Area	(1) Size: at least 5,000 acres; or a roadless island; or is of sufficient size to make practicable its preservation and use in an unimpaired condition; or is contiguous with designated or recommended wilderness by another Federal agency.	(2) Naturalness: generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.	3(a) Solitude: has outstanding opportunities for solitude.	3(b) Primitive and Unconfined Recreation: has outstanding opportunities for primitive and unconfined-type of recreation.	(4) Supplemental Values: contains ecological, geological or other features of scientific, educational, scenic or historical value.	Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
<b>WIA 8</b> 693 acres	No. Less than 5,000 acres and not an island. Not suitable for preservation and use in an unimpaired condition and not suitable for wilderness management because of its long, narrow configuration and lack of a sufficient core area that leaves the whole area vulnerable to impairment from adjacent land uses. Also, not adjacent to a Federal wilderness area.	No. This area contains a significant amount of logging roads that have not been restored and are not in the process of being restored. Also, the area is bounded by A-Frame Road, a maintained public road. Both these road impacts have a significant effect on the area's naturalness.	No. Because this is a linear area that is bounded for miles by A-Frame Road, there are no outstanding opportunities for solitude.	No. Because of the small size of the area and because it is bounded for miles by A-Frame Road, there are no outstanding opportunities for primitive and unconfined recreation.	Yes. Scenic values	No
<b>WIA 9</b> 149 acres	No. Less than 5,000 acres and not an island. Not suitable for preservation and use in an unimpaired condition and not suitable for wilderness management because of its lack of a sufficient core area that leaves the whole area vulnerable to impairment from adjacent land uses. Also, not adjacent to a Federal wilderness area.	Yes.	No. Because the area is so small and because a large portion of it is bounded by A-Frame Road, there are no outstanding opportunities for solitude	No. Because of the small size of the area and because so much of it is bounded by A-Frame Road, there are no outstanding opportunities for primitive and unconfined recreation.	Yes. Scenic values	No

Wilderness Inventory Area	(1) Size: at least 5,000 acres; or a roadless island; or is of sufficient size to make practicable its preservation and use in an unimpaired condition; or is contiguous with designated or recommended wilderness by another Federal agency.	(2) Naturalness: generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.	3(a) Solitude: has outstanding opportunities for solitude.	3(b) Primitive and Unconfined Recreation: has outstanding opportunities for primitive and unconfined-type of recreation.	(4) Supplemental Values: contains ecological, geological or other features of scientific, educational, scenic or historical value.	Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
<b>WIA 10</b> 412 acres	Yes. Less than 5,000 acres, not an island, and not adjacent to Federal wilderness land, but suitable for preservation and use in an unimpaired condition and suitable for wilderness management.	Yes.	Yes, but the area is small and the traffic from Route 93 (to the north) is audible from anywhere on the property. Also, the status of the surrounding land use is uncertain and if it is not protected soon, it could be converted to a highly developed area.	No. Because of the area's small size and the surrounding private property, there are no outstanding opportunities for primitive and unconfined recreation.	Yes. Rare plant communities, scenic values, ecological values	Yes
<b>WIA 11</b> 134 acres	No. Less than 5,000 acres, not an island, not of sufficient size to make practicable its preservation and use in an unimpaired condition, and not suitable for wilderness management. Also, not adjacent to a Federal wilderness area.	No. A power line that runs through the property and auditory impacts from two major roads on either side of the property both have significant effects on the area's naturalness.	No. The area's small size and the visual and auditory impacts of surrounding developed lands and road use severely diminish any opportunities for solitude.	No. The area's small size and its proximity to a State highway make it unsuitable for outstanding opportunities for primitive and unconfined recreation.	Yes. Ecological Values.	No

Wilderness Inventory Area	(1) Size: at least 5,000 acres; or a roadless island; or is of sufficient size to make practicable its preservation and use in an unimpaired condition; or is contiguous with designated or recommended wilderness by another Federal agency.	(2) Naturalness: generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.	3(a) Solitude: has outstanding opportunities for solitude.	3(b) Primitive and Unconfined Recreation: has outstanding opportunities for primitive and unconfined-type of recreation.	(4) Supplemental Values: contains ecological, geological or other features of scientific, educational, scenic or historical value.	Parcel qualifies as a wilderness study area (meets criteria 1, 2, and 3a or 3b)
<b>WIA 12</b> 526 acres	No. Less than 5,000 acres, not an island and not adjacent to a Federal wilderness area. Not suitable for preservation and use in an unimpaired condition and not suitable for wilderness management because of its shape and irregular boundary, and lack of a sufficient core area that leaves the whole area vulnerable to impairment from adjacent land uses.	No. The area is bisected by a power/ phone line, and contains a graveled refuge road used seasonally for hunter access. These two features have significant impacts on the area's naturalness character.	No. Visual and auditory impacts of surrounding developed lands and road use severely diminish any opportunities for solitude.	No. The area's small size and its proximity to a State highway make it unsuitable for outstanding opportunities for primitive and unconfined recreation.	Yes. Ecological Values.	No
<b>WIA 13</b> 79 acres	No. Less than 5,000 acres, not an island, not of sufficient size to make practicable its preservation and use in an unimpaired condition and not suitable for wilderness management. Also, not adjacent to a Federal wilderness area	No. The property has an actively maintained gas pipeline right-of-way that constitutes a major human impact and significantly affects the property's naturalness.	No. The area's small size and the visual and auditory impacts of surrounding developed lands and road use severely diminish any opportunities for solitude.	No. The area's small size and its proximity to a State highway make it unsuitable for outstanding opportunities for primitive and unconfined recreation.	No	No
<b>WIA 14</b> 74 acres	No. Less than 5,000 acres, not an island, not of sufficient size to make practicable its preservation and use in an unimpaired condition and not suitable for wilderness management. Also, not adjacent to a Federal wilderness area	No. This area contains the refuge headquarters and maintenance facilities as well as an active natural gas well. These structures have significant impacts on the area's naturalness character.	No. The area's small size and the visual and auditory impacts of surrounding developed lands and road use severely diminish any opportunities for solitude.	No. The area's small size and its proximity to a State highway make it unsuitable for outstanding opportunities for primitive and unconfined recreation.	No	No